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## PATENT ABSTRACTS OF JAPAN

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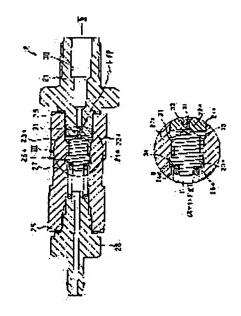
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#### (54) SAFETY VALVE FOR FUEL INJECTION DEVICE

### (57)Abstract:

PURPOSE: To prevent the rise of fuel pressure in a pressure accumulating pipeline by providing a fuel sump chamber for holding fuel leaking out from between a valve member and the seat face, and a means for communicating this fuel sump chamber with the low pressure side by the opening of a valve part.

CONSTITUTION: With the rise of fuel pressure in a pressure accumulating pipeline 12, a ball valve 22a is opened against the energizing force of a spring 24a by the fuel led in from an internal passage 30. When a ball valve 22a and a valve body 23a are moved by the specified quantity, the vertical groove 33 of the valve body 23a is communicated with the ring groove 34 of a housing 27. As a result, high pressure fuel led in from



the internal passage 30 escapes all at once onto the low pressure side, and the pressure accumulating pipeline 12 is returned to the set pressure in an instant. When pressure fluctuation is generated in the pressure accumulating pipeline 12 in the state of the fuel pressure led in from the internal passage 30 and the valve opening pressure of the ball valve 22a being approximately balanced, the ball valve 22a is opened and fuel leaks out slightly, but this fuel is held in a fuel sump chamber 35 provided between the valve body 23a and a connecting pipe 21 so as to be prevented from flowing out to the low pressure side.

#### **LEGAL STATUS**

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